524,713

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 4 March 2004 (04.03.2004)

PCT

(10) International Publication Number WO 2004/017718 A1

(51) International Patent Classification⁷: 27/00 // 31/00

A01G 9/24,

(21) International Application Number:

PCT/EP2003/009067

(22) International Filing Date: 15 August 2003 (15.08.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 0219062.7

15 August 2002 (15.08.2002) GI

(71) Applicant (for all designated States except US): ROCK-WOOL INTERNATONAL A/S [DK/DK]; 584 Hovedgaden, DK-2640 Hedehusene (DK).

(72) Inventor; and

(75) Inventor/Applicant (for US only): HOLMENLUND, Niels [DK/DK]; Graensevej 69, DK-2650 Hvidovre (DK).

(74) Agent: GILL JENNINGS & EVERY; Broadgate House, 7 Eldon Street, London EC2M 7LH (GB).

(81) Designated States (national): AE, AG, AL, AM, AT (utility model), AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA,

CH, CN, CO, CR, CU, CZ (utility model), CZ, DE (utility model), DE, DK (utility model), DK, DM, DZ, EC, EE (utility model), EE, ES, FI (utility model), FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK (utility model), SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

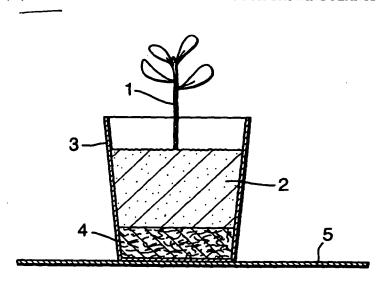
Published:

with international search report

 before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD AND ENVIRONMENT FOR GROWING PLANTS



(57) Abstract: The invention provides a method of growing at least one plant (1), preferably a large number of plants, in which a plant is positioned for growth in a first growth substrate (2) which has a first water uptake capacity and a first sinking time S1, and the first growth substrate (2) is in fluid communication with a discrete second substrate (4) is mineral wool of density 40 to 100kg/m² and which has a second water uptake capacity which is less than the first water uptake capacity and a second sinking time S2 and the value of S1 is greater than the value of S2, and during growth the second substrate is flooded with water at intervals. Preferably growth is under conditions of drought stress and/or nutrient stress. The invention also provides a plant growth environment such as a filled pot (3) comprising the first and second substrates in fluid 20 communication.